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AUTHOR Little, Judith Warren
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ABSTRACT

In this document, insights into teachers' professional community (or communities) derive from a comparison between teachers of the core academic subjects (English, social studies, science, mathematics, and foreign language) and those in three traditional vocational subjects (industrial arts, business, and home economics). Two areas of research are: (1) the extent that these high school teachers are members of the same professional community; and (2) the ways their respective orientations to the work of teaching foster or inhibit the closer integration of their work. This document concentrates on aspects of professional identity and community in five sites, all comprehensive public high schools in a single state. Although the schools differ in crucial ways, the school-level differences are of less importance here than some of the commonalities in the way that academic and nonacademic teachers are positioned within them. Among the findings were that the language of subject specialization is dominant, and the structure of the departments firmly in place. A few teachers and administrators envision more permeable boundaries between subjects, more meaningful ties across subject areas, and more sensible relations between school and work. (44 references) (RR)

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Center for Research on the Context of Secondary Teaching
School of Education, CERAS Building, Stanford University, Stanford, CA 94305-3084

ASPECTS OF PROFESSIONAL COMMUNITY IN COMPREHENSIVE HIGH SCHOOLS

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Judith Warren Little
University of California,
Berkeley

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ASPECTS OF PROFESSIONAL COMMUNITY IN COMPREHENSIVE HIGH SCHOOLS

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Judith Warren Little
University of California,
Berkeley

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ASPECTS OF PROFESSIONAL COMMUNITY IN COMPREHENSIVE HIGH SCHOOLS[1]

An occupational community comprises "a group of people who consider themselves to be engaged in the same sort of work; whose identity is drawn from the work; who share with one another a set of values, norms, and perspectives that apply to but extend beyond work-related matters; and whose work relationships meld work and leisure" (Van Maanen and Barley, 1987, p. 287). At one level, teachers might be said to form an occupational community distinct from other occupations. But within teaching there are also distinct communities of teachers. Beyond the formal distinctions made by categorical labels are the connotative dimensions that "lead some members to separate themselves from others who do denotatively similar work." (p. 295).

In this chapter, insights into teachers' professional community (or communities) derive from a comparison between teachers of the core academic subjects (English, social studies, science, mathematics, and foreign language) and those in three traditional vocational subjects (industrial arts, business, and home economics). To what extent are these high school teachers members of the same professional community? In what ways do their respective orientations to the work of teaching foster closer integration of their work, or inhibit it?

This analysis of teachers' worlds is shaped most broadly by a concern for the vitality of secondary schooling. The enrollment of secondary schools has grown and diversified dramatically in the nearly fifty years since the end of World War II. Large-scale studies of American high schools have generally supported the escalating criticism that too many high schools are "selling students short" (Sedlak et. al., 1986; also Cusick, 1983; Boyer, 1983; Sizer, 1984; Powell, Cohen, and Farrar, 1985). Such studies have culminated in reform proposals that challenge long-standing patterns of practice. Yet few of the proponents of reform have illuminated teachers' own experiences with high school teaching in ways that would help one to assess the genuine prospects for change. Prior studies of high schools, with the possible exception of Sizer's (1984) composite portrait of "Horace," have done little to illuminate the dailiness of high school teaching, or to show how daily realities position teachers to embrace or resist new possibilities. Indeed, one of the dilemmas we encounter is the way in which divisions of purpose, program, and people are so well-rooted in the language of schooling. Even as we try to imagine and invent new forms of schooling, or new relations among teachers, we find our descriptions of present practice confined by the conventional dichotomies: in this instance, academic *versus* vocational programs, purposes and subjects; academic *versus* non-academic students, teachers, and departments. A more integrative language remains elusive.

Prospects for remedying the fragmentation of the "shopping mall high school" or the sterility of the "bargained curriculum" are linked in part to the ability of teachers and others to reconsider long-standing patterns in the organization of high schools and in the purposes they espouse. The reform of secondary schooling is, after all, a human and social enterprise. It rests not only on adequate material resources, but also on the

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[1]This paper is adapted from J.W. Little (1992), Two worlds: Vocational and academic teachers in comprehensive high schools. Berkeley: National Center for research in Vocational Education, University of California, Berkeley.

intelligence, will, knowledge, and imagination of those who work in and with schools. My specific concern, then, is with teaching as work and the school as an adult workplace. I began with certain broad curiosities about the professional identities that secondary teachers acquire, the professional communities in which they participate, and the professional development obligations and opportunities they encounter.

This chapter concentrates on aspects of professional identity and community in five sites, all comprehensive public high schools in a single state. The schools do differ in crucial ways (see for example, McLaughlin, in press), but the school level differences are of less import here than some of the commonalities in the way that academic and non-academic teachers are positioned within them.

TWO WORLDS: ACADEMIC AND VOCATIONAL TEACHERS

Academic and vocational teachers occupy two separate worlds in comprehensive high schools. Not all teachers and not in all schools, to be sure. But the "two worlds" phenomenon is sufficiently pervasive, and sufficiently embedded in habitual ways of thought and deed, to command attention. It is a phenomenon that extends as well to research on secondary schools. That is, the discoveries of the past decade regarding school context, teachers' professional development, and teachers' career commitment are derived nearly exclusively from teachers in the core academic curriculum, or are presented in ways that obscure within-school differences. Vocational ("non-academic") teachers have remained nearly invisible in the mainstream literature on high schools.[2]

Academic and vocational teachers share certain realities that demarcate the occupation of teaching from other work. Both rely on the ebb and flow of life in a classroom to yield "craft pride," a sense of accomplishment. Both spend their work days surrounded by throngs of adolescents. Among both groups, there are those who bring to teaching a passion for their subject and an enthusiasm for the students they teach; and there are those for whom teaching is no more than a job. In these and other ways, the teacher of American Literature and the teacher of Occupational Auto dwell in the same world. But there are also important differences.

Subject Status and Professional Respect

Persistent stereotypes paint high school teachers as resolutely "subject-centered." Until very recently, however, there have been few efforts to penetrate that stereotype to discover the meaning that teachers attach to subject specialization. Those studies that do exist are devoted almost exclusively to the nature of subject affiliation among teachers of traditional academic subjects. Among the examples are Freema Elbaz's (1983) study of the English teacher "Sarah," Ball & Lacey's (1984) portrait of subject subcultures in four English

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[2]The distinction between the "academic" and "non-academic" teachers is not always clear, nor is it entirely uncontested. By common parlance in these five schools, the "academics" meant the five core subject departments: English, social studies, mathematics, science, and foreign languages. And "vocational" meant business, home economics, industrial arts, and, in two schools, vocational agriculture. The status of art, music, and physical education was ambiguous (but see Talbert, this volume).

departments; and Leslie Siskin's (1991) exploration of the academic department in comprehensive and magnet schools. Together, these closely-situated accounts of subject specialism in high schools help us penetrate the stereotype. To these examples we now contribute a view of subject affiliation expressed by teachers of conventionally-defined "vocational" curricula in five comprehensive high schools.

The status of subject specialties

The social organization of high school subjects mirrors the subject matter organization of higher education. Those fields that are organized as recognized disciplines, holding departmental status in the academy, tend to command greater institutional respect and compete more successfully for institutional resources in the high school. Departmental status and individual standing are clearly enhanced by teachers' ability to assert coherent claims to a subject discipline, with the university serving as a powerful external referent. This is not to deny that there are local variations, responsive to local community character and priorities, or that the imprimatur of subject expertise is impervious to the relationships and reputations established by particular teachers in particular circumstances. On the whole, however, subject credentials favor those in the academic tradition.

In her study of the academic department in secondary schools, Leslie Siskin (1991) chronicles the history of subject matter departments, and the waxing and waning fortunes of specific disciplines and departments (see also Goodson, 1988; Goodson & Ball, 1984). According to Siskin:

> Critical analysts ... interpret curriculum as the arena in which subjects battle over status, authority, resources, and territory...with teachers, courses, and departmental status the territory at stake. Personnel are enlisted in and defined as members of coalitions largely by virtue of their subjects, which results in the formation of "subject subcultures" within the school ..." (Siskin, 1991, p. 25)

Relative to their colleagues in academic subjects, vocational teachers in these comprehensive high schools enjoy lower status, less institutional influence, and more tenuous recognition from parents and community. An English teacher at suburban Oak Valley High School[3] describes a level of parental expectation, public support, and professional recognition that link a teacher's professional pride to the accomplishments of the school's college-bound students:

> I think [Oak Valley] is a place that's pretty pride-filled, if that's appropriate...The kids coming in the classroom are being pushed to do well. ...You have teachers who are in general enjoying their jobs and getting a reward from it. And from the outside, going to conferences and all, it's pretty thrilling to have people know I teach at Oak Valley. They'll say, "Oh, Oak Valley!" and they've heard of us. So there's a sense of pride here that, I think, affects all the different levels."

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[3]All schools and individuals have been given pseudonyms to protect anonymity and confidentiality.

This English teacher's sentiments are echoed consistently by other teachers in the traditional academic departments. But this pride does not, in fact, affect "all the different levels" in the same way. In this and other academically-oriented comprehensive high schools, we find a pronounced difference between teachers in traditional academic departments and teachers of conventionally defined vocational subjects. An industrial arts teacher, also at Oak Valley, complains: "The pride in voc ed is in the people teaching it. There's limited pride, limited acknowledgement out there."

Whatever pride vocational teachers display in their own work, and however they describe their contributions to students and to the society at large, most are conscious that their subject areas occupy a relatively peripheral place in the social organization of the high school. Some teachers dwell little on such matters, while others seem preoccupied with them. But the basic reality appears clear throughout. And while not every teacher described colleagues or departments in terms of status and influence, all those who did underscored the relatively disadvantaged standing of vocational subjects. This business teacher sounds a common theme:

> As a voc ed teacher I feel like I'm on the bottom of the pile. Priority wise, status wise. In every respect. It's a little bit painful, because you don't feel that others see the validity of what you're doing.

Vocational studies in the American high school have typically been treated as non-subjects.The phenomenon is not uniquely American. Australian scholar R. W. Connell (1985) describes the status dimensions of curriculum politics in this way:[4]

> The various curricula do not sit side-by-side in schools. They exist in definite relationships with each other, often involving tension between teachers. [This is a] direct consequence of the hegemony of the competitive academic curriculum. Marginalised curricula can gain space, status, and resources in the school by redefining themselves as part of the hegemonic curriculum. ... The pressure on a marginalised subject to do this can be quite serious. [p. 98]

Connell continues, regarding the relations between academic and vocational subject specialists:

> The contempt of academic teachers registered...for manual arts is not an easy thing to handle; nor is the experience ...of repeatedly seeing your best students leave your field because they would lose out academically if they continued with it. So the transformation of woodwork and metalwork into technics; cooking and sewing into domestic science, is not accidental..." (pp. 98-99)

Departments considered outside the academic core thus attempt to align themselves with recognized fields in higher education as a way of contesting the low status they

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[4]An article titled *It's not a proper subject, it's just Newsom* (Burgess, 1984; see also Burgess, 1983) reflects the same phenomenon in Britain. "Newsom" refers to the program of vocational and other studies oriented to "early school leavers," the result of recommendations contained in the 1963 Newsom Report (Newsom, 1963, cited in Burgess, 1983).

occupy in the high school. Home economics teachers in two of the schools are organized as departments of Consumer/Family Studies. Teachers of the "practical arts" complain that art and music are politically advantaged by their "fine arts" designation. And business teachers point to what they consider an anomaly: the study of business is valued in higher education but not in high school.

> We should be right up there with all the other subjects. They should be pushing people for the business law class, the accounting class, the computer class. Instead, it's like we fight for students and every year they're telling us nobody's signing up. Even though we go out here and try to recruit them ourselves - they all go on to business majors in college, but nobody's interested in it at this level.

The success of such claims rests in part on the demonstrated parallels between the content of the secondary curriculum and that found in institutions of higher education. On the whole, the departments' efforts have been only marginally successful. Most high school business curricula, for example, retain the stamp of secretarial training and thus bear little resemblance to coursework in a university business school.

Vocational teachers respond to subject hierarchies in part by contesting the singular standard of the university as that against which subject worth is properly assessed. When they identify alternative grounds on which status ought to be acknowledged, they point to the economy: the world of work and commerce, rather than the world of schooling. These comments from a home economics teacher typify the arguments we heard from many teachers:

> All of the nutritionists and dieticians come out of [home economics]. The fashion industry comes out of our field, the fashion design industry comes out of home economics. Interior Design is our field. Interior designers come out of our field. People have always thought of us as "stitch and stir," but when you think of the world of work, we probably represent one of the largest segments of society's jobs.

Such alternative claims for status on the basis of "real-world" considerations have gained little hold in these comprehensive high schools. The power of subject differences in bolstering or undermining teachers' professional identity is reflected in the differing degrees of confidence with which an English teacher and a home economics teacher parade their occupations in the world beyond the school. The English teacher celebrates her affiliation with English and with this English department in particular:

> You know, I've had people come up and say the Oak Valley English department is the best place in the county....And I think English ...is a subject that allows us an opportunity to really get to know kids...

A home economics teacher, by contrast, feels moved to hide her subject identity:

> When I go places and people ask "What do you do?" I always say I teach high school students, I teach teenagers. I always know the next question is "What do you teach?" You know, I really don't want to tell them anymore. "Oh, Home Ec! Oh, is that still around? Oh! I didn't know they still had that!"

Individual teachers are thus pressed to establish their academic credentials. Those vocational teachers who completed an academic major make it a point to say so. Others point to the intellectually demanding and academically legitimate content of their vocational training: "Home economists have a lot of scientific background." Those whose major fields have suffered reversals in the university find it difficult to assert their affiliation with a broader professional community that serves, in effect, as a political constituency. Thus, teachers who took their undergraduate degrees in home economics observe that they might be less able to do so today: the major has disappeared from several of state's universities, its subject content abandoned or absorbed into other specialties.

The difference in status accorded to academic and vocational teachers is reflected in the terminology that one principal employs to distinguish her academic and vocational staff: Academic teachers are "degreed," she says, while vocational teachers are "credentialed." In a telling commentary on the differential status that the two groups enjoy, she adds: "I suspect that most of our teachers would view themselves as college track teachers as opposed to vocational instructors, almost viewing those terms as mutually exclusive." The difference between "teacher" to signify academics and "instructor" for vocational classes stands out.

Subject status arises not only from the perceived rigor of one's undergraduate education and professional preparation, but also from the perceived intellectual demand of course content in the secondary curriculum. According to the vocational teachers, others consistently denigrate the cognitive or intellectual worth of designated "vocational" curricula. A drafting teacher comments, "It's taken about fifteen years for some people to actually give us any credibility that there's any intelligence in manipulative skills. Most of the time, the only intelligence we will accept is the reading-memory skills which are the academic skills." Implicit here is the assumption that work in the vocational arenas requires fewer intellectual resources than work in academic subjects, and that both the adults and the young people who dwell in the "shops" are lower in native abilities than those who populate academic classrooms.

Along with perceptions of intellectual substance comes a parallel set of perceptions regarding teacher workload—the intellectual, interactive, and pragmatic demands of teaching in one subject rather than another. Among the academic domains, teachers make fine (if not always well-informed) distinctions regarding one another's teaching demands, observing, for example, that the load is easier in math where the curriculum is highly standardized and evaluating student work is straightforward. Vocational teachers are generally convinced that their academic colleagues believe vocational courses to be easy on teachers as well as on students. As one home economics teacher reports, "I think a lot of them, probably many of them, feel that what we do is make cookies." Most put forth counter-arguments, cataloguing the hours of outside preparation required to organize classroom projects and demonstrations, and to assemble and maintain the necessary equipment and materials. These hours, they claim, equal or exceed the hours required to grade papers and examinations in the academic classes. Here, a home economics teacher describes the burden of preparing for foods classes compared to what she thinks is required for a math class or any class that is teachable from a textbook:

> With Home Ec ...there's so much preparation, there's so much. It's not like you're just opening a book and "Ok, guys, we're going to do Chapter 13 today. Let's read and discuss." That type of thing. Or, "These are your math problems, let's review them. Ok, this is

> what we're learning today, do page such and such and we'll review and do homework." I mean, that seems kind of cut and dried, where here there's so much activity and so much [material] and you have to consider your budget...

And a business teacher:

> I have had comments from at least one English person that I happen to have a prep period with, that she had no idea that we worked as hard as we did in the Business department. She thought that all we did was go in and say "Ok, do this."And the kids did it and you took no papers home to grade and et cetera, et cetera.

Ironically, these comments also underscore the way in which status differences are perpetuated by the relative privacy of teachers' work. Neither the academic nor the vocational teacher whose exchanges we glimpse here has a complete and realistic grasp of one another's classroom practice or workload burdens.

In the broadest formulation of such issues, then, vocational education occupies lower status than academic study in all five of our schools. One site summary [CRC site files] suggests that "in light of the strong academic focus of the state educational reforms and the school's fight to maintain some sort of academic identity in the face of the changing school population, teachers in these non-core subjects are constantly fighting off erosion of budgets and loss of faculty. Their status and reputation have little to do with the quality of their departments...; rather, because they are non-core (and often non-college track), they are by definition low status departments." Such a summary would apply reasonably well to all five of these schools.

Yet the specific relations among categorical subject status, the locally meaningful status of particular subjects in particular schools, and the realities of teachers' work remain to be worked out. For example, the advantage that generally accrues to academic teachers is diminished at Valley High School, where rapid changes in the student population have frustrated many academic teachers; the same changes have consolidated the position of the vocational programs. (See also Talbert, in press, for a discussion of the way in which subject hierarchies are altered in a performing arts magnet school). And at Oak Valley, the esteem that teachers derive from their association with a strong school may only intensify the status problems that accompany membership in a vocational department.

> I think it's a great school. It's fun to come to work. The only negative thing that I can think of—had I to do it over again, I probably would not have become a vocational ed teacher. I would have been in one of the academic subjects. I thought business was in the heart of the academic thing [but] ...the counselors and everybody else, it's like they just say "Well, that's an elective and it's not that important." I really was shocked to find out the status of the business department.

In sum, the status differences between vocational and academic teachers originate partly in the status hierarchy of the subject disciplines in higher education, and in the perceived intellectual demands posed by academic and non-academic fields of study in the secondary curriculum. They are sustained, too, by the value attached to the respective student clienteles with whom academic and non-academic teachers work.

Subject status and student clientele

Throughout the service professions, the status of practitioners is closely linked to the status of the clients they serve. Thus, social workers as a group occupy less valued terrain than accountants. Within occupations, too, client characteristics matter in establishing prestige. Doctors who serve the affluent generally command more public deference than doctors in the employ of public hospitals. On the whole, professionals who work with children rank lower in the status hierarchy than those whose clients are adults. Work with older children confers greater prestige than work with younger ones; hence many of these teachers tell of careers improved by a move from junior high school to high school, or by the opportunity to work part-time in a community college.

Within high school teaching, still finer distinctions are made. The status order of subjects, aligned as it is with the subject hierarchy of the university, is responsive to the "college bound" or "non college bound" status of one's students. One wins accolades by association with students who achieve success in the academic curriculum or in highly visible extracurricular activities that are also valued components of university life (athletics, band, other performing arts). Conversely, an academic teacher's standing is eroded by exclusive affiliation with low-achieving students. Talbert (1990) estimates that about one-quarter of U.S. high school teachers could be considered "tracked" by assignments to teach low-achieving students. (A still smaller percentage of teachers work exclusively with high-achieving students, teaching a steady diet of advanced placement or honors classes). Talbert's analysis of the 1984 High School & Beyond data, together with Merilee Finley's (1984) ethnographic study of teacher tracking in a large high school English department, suggests that consistent assignment to low track classes has a deleterious effect on teachers' orientation toward their work. According to both studies, "low-track" teachers less often perceive themselves as well-supported by administrators and colleagues, are less likely to enjoy opportunities for professional growth, are less successful in the competititon for instructional and organizational resources, and feel less efficacious in their work with students. The consequence, argues Talbert (1990), is to exacerbate the inequalities experienced by students.

The "tracking" phenomenon affects a relatively small segment of academic teachers in these schools. It is a circumstance in which <u>some</u> academic teachers find themselves, and one which varies widely within schools, by department. Those most vulnerable to "low-track" assignments are those teachers newest to the school and those held in lowest regard by administrators or department heads. Within some limits, the presence of "low-track" students and their teachers does not jeopardize the standing of an academic department. There is no doubt a threshold of student failure or remedial courses below which a department cannot fall and retain its legitimacy as a properly academic enterprise. And a department's reputation may also be jeopardized by marginal performance in honors and advanced placement classes. But academic departments retain their central position even when some individual teachers find themselves confined to remedial classes. And the affected teachers continue to identify more firmly with their departments than with similarly situated "low-track" teachers in other departments (Talbert, 1991).

However, the "low-track" phenomenon is a circumstance that well describes the <u>majority</u> of vocational teachers and, indeed, entire vocational departments or programs. In all five schools, student placement patterns concentrate "the 'low' and the 'special'" in non-academic classes. In some very real sense, these are vocational teachers without vocational students. That is, they receive few students who are clearly dedicated to a vocational

course of study (see Little and Threatt, 1991). Presumably, students enthusiastic about pursuing a program of work education would soften or eliminate the stigma of external status attributions. Roger Townsend compares his former life as a drafting teacher in a specialized vocational center with his present work in a comprehensive high school:

> My most enjoyable teaching assignment was over at the vocational center...because the students had a direction. ...I was teaching kids to become drafters and designers and engineers....

Teachers who cultivated a craft because it held genuine appeal for them, and who entered teaching in the hope of finding students with similar inclinations, now find themselves viewed not as skilled craftspeople but as caretakers of the marginal student. Neither their own subject expertise nor their accomplishments with academically marginal students yields much recognition. To vocational teachers, the link between the prestige accorded teachers and the academic standing of their students often represents a poor alignment of effort and reward.

Some teachers respond with equanimity...

> But we're not the kind of program that <u>does</u> get recognition. And we don't get those star students or you're just not going to get it. And I went into it knowing that's the way it is.... So it doesn't bother me. It does a little bit sometimes.

And others respond with resentment...

> So you begin to feel real unaffirmed. ... So who gets the awards? It's the ones that are glitzy or the ones that have all the top notch students who can stand up and say "Because of this teacher, I got into Stanford or I got into Yale." Well, what about people down here who every day are putting up with all of the riff-raff, who are putting up with the discipline problems, who are really working in the trenches. And I guess that's maybe where we see ourselves. We're in the trenches.

Both kinds of responses, however, confirm the link between a teacher's identity and status and those of the clientele, reinforced and perpetuated by a schooling organized to distinguish between college-bound and non-college bound students, and to bracket preparation for work from academic endeavors. Such distinctions also constrain the ways in which teachers might contribute to one another's work by engaging in cross-disciplinary ventures, teaching one another's students, or acknowledging one another's achievements.

The satisfactions of subject specialism

Teachers' continued enthusiasm for teaching is bound up with opportunity to find both intellectual stimulation and emotional satisfaction in the classroom. Teachers judge their careers in part by the success they experience in getting to teach the subjects they know and like, in the schools they want, with students they consider both able and interested, among colleagues they admire. On a semester-by-semester and year-by-year basis, their pleasure

in teaching is calibrated by the combination of classes configured in a five-period teaching day.

In the subtle calibration of teaching pleasure—the intricate effects woven in each configuration of kids and content, of time of day and time of year—a teacher's sheer liking for the subject looms large. To say so is not to invoke a simplistic form of the prevailing stereotype. Teachers typically place subject commitments amid broader conceptions of what it means to be a "teacher." Business teacher Beth Elgar does so when she cites involvements with school-based management, school athletics, and the PTSA as evidence that her departmental colleagues are "a wonderful example of educators who care very much about students, [about] other disciplines beyond the classroom." Subject enthusiasms alone cannot compensate for troubles with students, or always help to resolve them. Nor do subject enthusiasms and subject commitments ensure teaching that is substantively lively or pedagogically inventive. Nor, finally, do all teachers evince genuine interest in the subjects they teach, or invest equally in extending their subject expertise. Nonetheless, when students recall teachers who have inspired them or enabled them to learn, "enthusiasm for the subject" is one major contributor. The passion for subject that many of these high school teachers bring to their work is exemplified in their stories of deciding to teach. Math teacher Charles Ashton[5] considers geometry his favorite course, and recalls his first introduction to it as a student:

> Geometry was the thing that really turned me on to mathematics. For me it was a critical course, and I guess I now interpret it the same.... It was so logical and so obvious, I thought God had given me the answer to the universe. It's kind of like listening to a Beethoven Symphony in a way, this is the way it's supposed to be.

Hannah Naftigal started out as an elementary education major and switched to home economics after a course she found inspiring. "Something clicked in me when I took that course," she recalls. "It felt like I had come home." Both of these teachers came to teaching with a commitment to the subject, and both retain a certain subject loyalty. For them and for others like them, the most attractive reform proposals would be those that intensified the pride and pleasure to be found in subject expertise.

To some extent, both Charles Ashton and Hannah Naftigal must struggle to experience the rewards of subject specialism in their comprehensive high schools. Both are affected by the ethnic, linguistic, and academic diversity of the students they teach, leaving them uncertain how to use the medium of the subject to reach all students. Both are affected by the tedium that may result from many years in the same assignment, and the urge to find intellectual stimulation. As one of Ashton's math colleagues sums it up: "You know, the 300th time you've explained angle-side-angle (theorem in geometry), it's really boring." And both are sensitive to the ways in which particular teaching assignment configurations—the combination of "good" or "tough" classes in a five- or six-period day—can enlarge or depress the satisfaction they find in their subject matter.

But despite the similarities in the subject commitments that Ashton and Naftigal bring to their teaching, and despite some commonalities in the teaching environments they encounter, these two teachers differ in the opportunities each finds to derive craft pride

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[5]This example comes from a CRC sub-study of math teachers participating in an Urban Mathematics Collaborative funded by the Ford Foundation. See Little & McLaughlin, 1991.

from subject matter teaching. The weight of recent reforms combines with the traditional subject hierarchy to place the satisfactions of the mathematics teacher more readily at hand, and to render those of the home economics teacher more uncertain. Such externalities tell part of the story. Another part is bound up with the factors that govern teaching assignment.

Academic teachers: subject specialism and the politics of seniority

Nearly all the academic teachers in these five schools teach full-time in their area of specialization; they can legitimately and comfortably lay claim to being an "English teacher" or a "math teacher." This is not to say that they look upon their course configuration with equal satisfaction and confidence, or that they attain the same measure of success in each class (see Raudenbush, Rowan, & Cheong, 1990). Nor is it to say that they place loyalty to the subject ahead of the loyalties expressed in "working with kids," though some do. But whatever the balance of "subject" and "student" they seek, academic teachers are generally able to forge it in the context of their primary subject specialty.[6]

We asked teachers, based on their personal experience, to evaluate eight factors for their relative weight in making teaching assignments. For academic teachers, seniority in the subject department is a major factor in determining whether the assignment one receives is a good fit with one's preparation and preferences; among these academic teachers, seniority and other related factors (formal preparation, experience with grade or level) are more likely to operate than observed teaching performance, departmental policies regarding rotation or "best fit," or administrative expedience. To varying degrees, teachers compete over what Finley (1984) termed "the good schedule," one that represents, from the teacher's perspective, a desirable fit with favored subjects and students. Status considerations figure prominently in Finley's analysis; teachers earn prestige when they teach subjects and students highly valued by the larger institution and the community, and their prestige is diminished by teaching low-achieving students and remedial content. Interviews with teachers in our five schools suggest a more diverse array of explanations in which the status of courses and students may be offset by other personal predilections and commitments. In any event, the seniority system that prevails in many, perhaps most, departments is the major limitation on teachers' efforts to get classes in which they anticipate the greatest success and satisfaction. It is this system that comes under assault in discussions of new teacher induction, where it is found that new teachers are most commonly given the lowest level courses and the youngest or most troublesome students.

The dynamics of the seniority system have perhaps best been uncovered by Barbara Neufeld (1984), who finds teachers able to describe its features and consequences in considerable detail: how long it takes to get seniority; the maneuvering within a

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[6]Determing whether someone is "teaching in the subject field" is somewhat problematic, especially in the academic areas. Formal credentials do not account for genuinely felt subject expertise or subject preferences. The social studies teacher who has taught world history for several years can be put off-balance by an assignment to pick up two sections of economics. Through credential "endorsements" teachers stay "legal" but may find themselves teaching out of their depth. Gehrke & Kay (1985) have speculated that the core academic subjects have become "the dumping ground of teacher misassignment."

"personalized hierarchy;" the appeals to fairness that help weaken the power of seniority; the frustrations of "waiting out your turn;" and the disposition to "lock in" a good course, once in possession. Seniority for purposes of instructional assignment operates informally. That is, seniority provisions in formally bargained contracts affect teacher assignment to schools by governing conditions surrounding transfer. In no case in our study, to our knowledge, were there explicit provisions for the use of seniority to control assignments at the department or individual class level. Nonetheless, the seniority factor was evident in the master schedules. The impact on individual teachers could be susbtantial. In each of our five schools, there are departments in which even the most junior teachers have fifteen years or more of teaching experience: A long wait to a "good fit."

An English department and a science department in a single school represent contrast cases in the use of seniority to decide teacher assignments. In the English department, the effects of seniority, while not completely absent, are greatly muted by the presence of a department policy calling for the regular rotation of remedial courses, and for widely distributed responsibility for the department's course offerings. In addition, the chair makes a well-publicized effort to grant each teacher his or her first choice class. The rotational principle is visible in the master schedule; only one of the department's twenty-five regular teachers shows a heavy load of remedial classes two years in a row. [This contrasts with Finley's English department, of equal size, in which nine teachers were consistently assigned to low-track classes]. Of the department's twenty-four teachers, five dominate the honors and AP classes (accounting for all such sections in 1989-90, and ten of thirteen sections in 1990-91). In no case do honors classes make up a teacher's entire teaching load. The former chair offers this explanation:

> I think the school is pretty much philosophically doing what it says it should do and that's provide the college bound track to most of the students. I know that we in the English Department feel very strongly that our objective is to get the kid out of that remedial track and get him into the regular track and I know that that's. it's, we talk about it all the time. When I was department chair, I said that I think that those are the kids that need the teacher with the most energy and the most enthusiasm and so we're just going to rotate it. And everybody in the department will be involved in those courses and that's the way it goes.
>
> The honors program, many of the teachers just don't want to take on what they see as a lot of extra work. Or some are a little concerned that the kids are bright and are demanding and are challenging, and I suppose they don't see themselves as maybe having the confidence to go battle with kids who are that insightful and who read things that maybe that they don't even see. So, there certainly isn't a crowd of people waiting to jump in and teach the honors or the A.P. courses. That just doesn't exist. They seem quite happy to let some of us do that. And, I think most of them are pretty happy knowing that they're working with kids who are college bound and the "average kid" at our school and they like being involved in that band. [7]

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[7] The department chairs in this English department have consistently taught two or three sections of advanced classes. It is not clear how to explain the pattern in this instance, except to say that it does not correspond to teacher seniority. It could be seen as a "perk" of the chair, but such an explanation is complicated by the fact that this department has a reputation for promoting strong curricular leaders and

In the science department, a different picture emerges. The chair of this department, too, maintains that the department bears a responsibility toward low-achieving students. However, there is no equivalent norm for rotating assignment of remedial classes among teachers. In a three-year period, the chair once acquiesced to pressure from the administration to take a turn in teaching a basic science course, but the experiment was short-lived (one section taught once). He and other experienced teachers consistently dominated the advanced courses and those courses enrolling juniors and seniors. A newcomer to the department says "Someone would have to die for me to get to teach chemistry." That teacher is one of three new members of the department who all teach full loads of the lowest level basic science, life science, and physical science classes.

Academic teachers, then, are very likely to be teaching within their subject specialization, but less certain to be matched consistently with courses and students with which they feel most efficacious. Career trajectories and fluctuations are linked to what teachers individually and collectively come to view as "the good schedule;" the good schedule, in turn, is shaped by the demands, opportunities, and rewards presented both by the subject and the students.

Vocational teachers: subject specialism and the decline of electives

The opportunities for vocational teachers to demonstrate their subject expertise and indulge their subject-related enthusiasms are powerfully constrained by two related factors in comprehensive high schools: (1) the decline of enrollment in non-academic electives following shifts in the high school graduation requirements; and (2) student placement practices that populate vocational classes with students whom teachers see less as "work oriented" than as "academically marginal." Among the most important factors in accounting for assignments, vocational teachers rank their own preference for the course, their formal preparation, and administrative expedience. In their susceptibility to "expedience" assignments, they differ dramatically from most academic teachers. (Vocational teachers also give a high rating to seniority, but its meaning is unclear in this instance. In only one department out of the fifteen vocational departments we studied was seniority likely to distinguish teachers' access to preferred assignments. In all other departments, there were too few people, or too many sub-specialties, or too uniform a level of "seniority" for it to shape what Neufeld (1984) terms a "personalized hierarchy.")

The pattern across the five schools shows a steady record of decline in total numbers and in full-time assignment of vocational specialists. Most resilient have been the home economics (or consumer/family studies) and business departments; most diminished have been the trades-oriented industrial arts departments. Increasingly, teachers preserve full-time teaching assignments by teaching out of their primary subject area, or by converting traditional courses to serve the purposes of basic skills instruction in academic areas. Departments maintain teaching positions by developing a marketable combination of

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strong teachers for that position. Finley (1984) observes that the teachers who controlled the advanced classes justified their assignments on the basis of their superior expertise, while the teachers who were excluded from them were skeptical. In this instance, we have little basis on which to dispute the chair's own interpretation.

"vocational" courses and courses that might be termed "personal interest electives." Common among the vocational teachers is a pattern of survival-oriented entrepreneurialism—"scrounging" and "hustling"—by which individual teachers retain sufficient resources to carve out a full-time schedule of courses. Some take considerable pride in the programs they have built. An example is Josephine Raney at Valley High School, who has developed a program of work preparation in industrial cleaning for special education students.

The decline in teaching staff is matched by a decline in the number of course offerings, and a shift in the types of courses available. The curriculum of the vocational specializations, as recorded in course titles, is not always recognizably "vocational," though it is consistent with the "life skills" orientation expressed by many of the teachers. At the beginning of our study, all five of the schools offered fewer vocational courses than their staffing permitted. That is, teachers whose background and experience lay in industrial arts, business, agriculture, or home economics were teaching fewer than five periods a day in those areas. Over the three year period, all schools reduced the total number of offerings still further. Thus, the range of course offerings that would communicate a subject specialty and would provide "like-minded" colleagues for teachers is missing. Increasingly, teachers confront a "compressed curriculum" that bears little resemblance to the rich program in which they once participated and from which they draw their professional identity. Wood shop teacher Ed Gordon describes the changes and their effect on his teaching assignments:

> They've taken shops like the high school metal shop — that's a weight room for the football team. They closed the door on the wood shop. Now they have one class of stage craft. I don't even think drafting's offered anymore.
>
> *What are you going to do?*
>
> Well, I've got probably twelve years more. I can teach art. I'm teaching art this year for the first time. I still love wood and I believe in it. But I'll hang on.

Ed Gordon is resigned to "hanging on," but one cannot help but gain the impression of curricula steadily weakened and careers derailed. Not all vocational teachers respond with the same equanimity. Greg Zeller, some years younger than Gordon and Hunter, resists the prospect of "going backwards" in his own career. When his small engines program was cut, he entered aggressively into a district-level project to develop an applied technology sequence. From his point of view, applied technology constituted a move to link academic and vocational studies and a move consistent with his own career interests. It is not clear whether his efforts will bear fruit at the school:

> [Applied Technology] is something I'm interested in teaching, but I'm not also interested in bucking the system along the way. If we're getting cooperation from all levels, including funding to do this thing, then I'm willing to participate, and put in time and effort and so forth into it. But what I see is one of the assistant principals already saying "Well, you know, we're not having that program here."

> So, if those roadblocks keep coming at me, I'm not going to go backwards. I'm not going to go from a program that I built and designed the facility and a program that I've been real proud of—because I've taught in four different sets of trailers, real inadequate facilities as I stepped into this program for five or six years. But each time I felt like I was a little better off and the program was [developing]. I'm not going to go back to a situation which is, you know, teaching out of inadequate facilities, not designed for what I need to do. And teach in those conditions for a long period of time. So I would do that for a year with a real sense of things are progressing and we're converting that facility into an Applied Technology facility the next year, but I don't want to go backwards.

These career fluctuations take their toll on teachers' commitment and performance. Greg Zeller tells us that if his plans for the Applied Technology program are thwarted he will leave teaching altogether. Short of that, he implies, he will curtail the energy he devotes to his teaching. And he will be more skeptical about new proposals in the future.

Teaching priorities

The classroom affords the most immediate return on teachers' efforts. As Metz (in press; 1990) emphasizes, students form teachers' most profound working condition. In that regard, to label high school teachers simply as "subject centered" (in implicit contrast to the "student centered" teachers who inhabit elementary classrooms) is an overstatement in many ways. Secondary teachers view with ambivalence colleagues who "know their subject" but who "can't connect with kids" or "don't really like kids." Many construct their teaching task in terms of supporting the general maturation of young people—"helping them become independent." Such teachers paint the subject as a medium, not an end in itself. An English teacher reports that English is an attractive subject because the study of literature engenders close relations with students: "lets you really get to know the kids."

Teachers' subject commitments and subject philosophies are thus distinctly those of the teacher: subject concerns are separated only with difficulty from concerns for students. Teachers may be united or divided by the priorities they express and the views they hold regarding "what's best for kids." (See, for example, the description of competing teacher subcultures in Metz, 1978; Hargreaves, 1986; Ball, 1987). In this respect, academic and vocational teachers share a concern for students' command of basic academic skills, their overall level of academic achievement, their personal maturation and social development. Nonetheless, it is the differences rather than similarities in their orientation to teaching that seem most to mark the relation between vocational and academic teachers. Academic teachers more often sound the recurrent theme of subject mastery and college preparation, and derive their sense of individual and institutional pride (or frustration) from the numbers of college acceptances. Vocational teachers more often are set apart by their concerns for preparing students for employment. Greta Royce at Onyx Ridge explains:

> I teach the Child Development program, and my program has been designed and developed to train high school students to be pre-school teachers. I'm a home economist, my degree is in that. And, so I could be teaching any of the other regular Consumer/Family classes. However, I selected vocational education

> because I feel it's just so vital for our students to have an opportunity to pursue career interests at the high school level.

The principal of Ms. Royce's school does not share her view:.

> I have to tell you that even personally I am not convinced that our job should be training kids for jobs in high school. I think we're doing a disservice to kids by having them shut down their options too soon and sending a message that all we're about is to prepare them for a job. And I don't that's what we're really all about. That's an aspect of what we're about, but I don't believe it's our primary purpose.

The collegial environment in which Greta Royce teaches is shaped in part by this principal's perspective on school priorities, and in part by the general disposition toward college preparation that teachers in the school express. We found little evidence to counter the principal's observation that most of the school's teachers identify themselves with an academic mission and that they differentiate college preparation clearly from vocational preparation in the short term (that is, preparation for work immediately following high school, or following completion of a vocationally-oriented community college program). On the surface, at least, the language that teachers employ to describe their interests and state their priorities serves largely to separate vocational and academic teachers.

Subject identities, and the teaching priorities to which they are tied, remain a fundamental part of professional community for most of these teachers. The subject designations of departments count in the competition for resources; and subject expertise counts in the view teachers have of one another.The opportunities for colleagueship among teachers, and for the reconstruction of purposes and programs within schools, reside largely in the resources of subject expertise. And teachers' subject affiliations are given prominence by the departmental organization of the high school.

Departments[8]

Departments linked to established subject matter disciplines are a significant organizational feature in these comprehensive high schools and the primary frame of reference for most teachers. Despite assaults on segmented curricula and departmental organization, subject matter departments continue to dominate the social and political organization of the secondary schools.[9] These comprehensive high schools are no exception. At four schools, subject matter affiliations are rendered organizationally salient through a formal departmental structure; at a fifth, efforts to build and sustain an alternative structure

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[8] Most studies of high schools have concentrated on school-level analysis, with selected illustrations of individuals' perspectives and experiences (for example, Sizer,1984; Powell, Farrar & Cohen,1985; and Boyer, 1983). In recent exceptions, Sandholtz (1989) has explored the variations perceived "inducements to teach" in four departments, and Siskin (1991) has framed her study of "the academic department" to incorporate elements of department cohesion, status, subject-matter and pedagogical orientation(s); she also examines the role of the department head.

[9] Andy Hargreaves (1988) is among those who have delineated some of the deleterious aspects of subject specialization , while Sizer's widely publicized proposals for restructuring the high school would abandon or seriously weaken departmental boundaries (Sizer, 1984; Sizer,1992).

organized around "learning units" are gradually giving way to restored subject matter boundaries (see Siskin, 1991). Among the five schools, no fewer than 86 percent and as many as 97 percent of regular classroom teachers were teaching full time in a single subject department. In recent experiments to re-align vocational and academic curricula, schools preserve subject matter groupings even while organizing new multi-disciplinary "houses" or "career clusters."[10] To some extent, they are driven by external circumstances to do so. The state's curriculum frameworks are subject-specific, as are testing protocols, state-approved text books, university admission requirements, and regulations governing teacher licensure and assignment.

Given the dominant subject-matter organization of high schools, departments represent a naturally occurring ground for teachers' interactions and satisfactions (or frustrations). Under present configurations, the department is the most prominent domain of potential interdependence among teachers. In seeking meaningful arenas for interaction and interdependence among teachers who work largely as "independent artisans," Huberman (in press) argues, "I would rather look to the department [than the school] as the unit of collaborative planning and execution in a secondary school... This is where people have concrete things to tell one another and concrete instructional instructional help to provide one another--where the contexts of instruction actually overlap" (ms p.64).

The relation between academic and vocational teachers is thus inescapably linked to the history of subject organization in the high schools. Our survey data record the reported levels of departmental identification across the five schools. On survey measures, all schools report moderate to high levels of departmental affiliation. In interviews, too, teachers make the department (or subject) a prominent part of the stories they tell. They do so even at Rancho, where the faculty has made a concerted effort to displace departmental organization. Rancho has the lowest level of "departmental community," a half standard deviation below the public school mean. The next lowest school mean is found at Onyx Ridge, where approximately one-fifth of the teachers teach in more than one department. At Oak Valley, where nearly 140 teachers are organized in five academic and nine non-academic departments, the department is the major professional arena for most teachers.[11] On survey items designed to elicit department-based collegiality, Oak Valley produces the highest mean among the sixteen schools; it also records the highest mean score on teacher coordination of courses. In this school, teachers almost certainly interpreted the latter item to mean subject-specific coordination at the school and district levels. And across all five schools, departments and subject affiliation are meaningful components of teachers' work life. One measure of the competitive strength of vocational education, then, is the individual and collective strength of vocational departments.

Departments define themselves, and are defined by others, as "strong" or "weak." The definitions have multiple referents. When the chair of the industrial arts department judges the department to be "very strong," he is referring to the members' long-standing friendships and to their shared support for the non-academic student. When an

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[10] Among the schools investigating new structural arrangements are those who competed successfully for funding on the state's School Restructuring initiative and the state's High School Investment Program. The latter program explicitly targets the integration of academic and vocational education.

[11] The academic departments are English, social science, math, science, and foreign language. The non-academic departments are art, music, business, consumer/family studies, industrial arts, vocational agriculture, health, physical education, and special education.

administrator judges the same department to be "weak," he is recording his criticism of the department's level of initiative in program innovation. That is, internal and external judgments do not always coincide; nor do insiders and outsiders, teachers and administrators, always assess the salient elements of "strength" in the same way. For some vocational teachers, congenial relations among peers are sufficient to outweigh low institutional prestige; and for some teachers in academic departments, being resource rich does not compensate for the absence of intellectual and professional accord. Overall, however, some conditions could be said to contribute to department strength, and others to erode it.

Department composition

One of the major contributors to departmental "strength" among the four English departments studied by Ball & Lacey (1984) was full-time participation by a cadre of subject specialists. Most academic departments in our five schools were able to preserve the full-time instructional services of their subject experts.[12] That is, most teachers of math, science, social studies, and English taught full-time assignments within their subject specialty. Vocational teachers, especially those with general secondary credentials, were more vulnerable to assignments out of their primary field. Sometimes those assignments require teaching as many as four periods a day in another subject (often math or science); in other instances, they require traveling between schools. In 1989-90, for example, twenty-one teachers in the five schools were assigned to teach in two departments (exclusive of coaches). Of these, eight (or 38 percent) were from vocational subjects whose teachers constitute only twelve percent of the teacher workforce. An additional three vocational teachers maintained their full-time assignment in their specialty by traveling between two schools.

In a heavily departmentalized structure, to lose subject specialists from a department is to weaken the social cohesion and programmatic unity needed to compete for resources; similarly, to admit to the department full- or part-time members who are not subject specialists is to weaken the department's professional standing. One might envision an alternative configuration in which a group's competitive standing was contingent upon interdisciplinary rather than single-subject strength. Such a shift cannot be managed on a subject-by-subject, or department-by-department basis, however. It requires a uniform shift in the principle of organization—for example, to a house or career cluster model. Rancho High School did attempt a variant of a house configuration, but competition over resources within "learning units" remained tied to subject specialties.

Among academic departments, a shift in the composition of the department membership (more part-time teachers, for example) may occur independent of shifts in department size. In a case study report titled "Are core academics the dumping ground of teacher misassignment?," Gehrke and Sheffield (1985) observe that in times of declining enrollment, academic courses are maintained through "misassignment," while courses requiring special technical skill (instrumental music, wood shop) are cut from the school

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[12] Most of the "drain" of subject expertise from academic departments in these schools occurs not in the form of cross-subject teaching, but in the form of commitments to the school's athletic program. Those teachers who coach spend one period of a five-period day teaching in the physical education department, or a twenty percent of instructional resources devoted to academic subjects.

program altogether. In our five schools, we found a similar phenomenon of teaching assignment following the shift in high school graduation requirements. In the wake of such developments, the remaining vocational teachers, especially in the industrial arts, may become vocational generalists (for example, teaching isolated sections of wood, metal, and drafting.) Thus, academic departments maintain or increase their size but lose their claim to subject expertise, while vocational departments lose both size and specialist depth. Each of the five schools has at least one one-person vocational department. At Oak Valley, the largest of the schools, the largest vocational department numbers six, while the four "core" academic departments range in size from fourteen to twenty-five. At the remaining four schools, the maximum size of the vocational departments is four; the maximum size of academic departments in the same schools is fourteen. And as vocational departments dwindle in size, little remains to link teachers together or to serve as a platform for cross-departmental work. A home economics teacher at Valley says:

> As much as I would like to see the department growing, it seems to be diminishing. We really don't have a full time teacher. We just have the two courses. Possibly [if we had] a teacher and a half, that would give you somebody to kind of share your ideas, communicate with, that type of thing. I go to the different district meetings and we have a chance to talk about things there, but you really can't get to the nitty-gritty because there's nobody that knows exactly what's happening in your school. It would be different having somebody in the school, actually sharing what's happening.

The school's only business teacher compares her present isolation with past circumstances, in which she could count on others for stimulation:

> I had three other teachers at [my previous school] and we could bounce off each other.Here I don't really have anyone yet. Because I'm the only business teacher, you know.

The programmatic strength of a department thus begins with its membership: the pool of knowledge and experience available in the teachers who make up the department's roster. In Oak Valley's English department, all teachers are full-time members of the department who bring to their work extensive formal preparation in English. All members of the department are available to devote the majority of their time and energy to the teaching of English and the refinement of the English curriculum. The department's policy of encouraging teachers to tackle a new course every couple of years has resulted in a faculty with collective ability to teach widely in the department's curriculum. In the industrial arts department, by contrast, only one of six teachers continues to teach a full-time load in his main area of expertise. The teachers pursue very separate specialties, ranging from electronics to auto and metal work, adding to the difficulty of relying on flexibility in staffing to achieve curriculum depth and continuity.

Department leadership

The power of departments in secondary schools is enhanced by a formal provision for department leadership, and correspondingly diminished when no such provision is made. Two of the three districts that serve as home to our five schools support the position of department head; in both districts, the position is potentially one of substantial organizational and collegial leadership (though it is not always enacted in this way). The third district, in which Esperanza and Rancho are located, eliminated formal support for

the department heads several years ago as a "cost-cutting" measure. But even within the former two districts, resources to support departmental leadership are not uniformly distributed and do not go uncontested. An industrial arts teacher at Oak Valley typifies comments we heard frequently regarding the vocational departments' claim on resources for department leadership:

> A lot of people think because we have [only] six people, and because our department doesn't have papers to grade, that the department chairman doesn't have the load that the other other department chairs do. But if you look at all the equipment that we have to make sure that it stays [in repair], pollution, and this is one of the things, that you can't just come in and write a work order and expect it to happen. You've got to follow through. So, we do have to stay on top of it.

An important influence on the department's professional and organizational presence is the stance assumed by the department chair. In Oak Valley's English department, three successive chairs of the English department sound a common theme—the role of the chair is to sustain both the coherence of the curriculum and the cooperative spirit among teachers. Teachers compete for the position of chair on the basis of substantive expertise and their ability to lead a group of respected experts. (There were three internal candidates for the position when it last came vacant). The present chair of the industrial arts department, by contrast, describes a rotation in which "we all take our turn in the barrel." The main job of the chair in that department is to assure appropriate and timely expenditures of the equipment budget. The chair of the business department reports that her position is "strictly a liaison with administration." A generally permissive or timid stance toward department leadership may prove detrimental to any department, but more so to those without other forceful advocates in the organization.

Competition for resources

Departments in the same school may differ dramatically in the material resources they command: space, equipment, up-to-date texts, supplemental materials, professional development monies, and the like. To some extent, the differences are felt both within academic and non-academic arenas. As Siskin (1991) relates, for example, science departments are typically favored in the resource competition in ways that social studies departments are not. She traces the disparities in part to the external prestige of science, the "tightness" of scientific paradigms compared to those of social studies fields, and the relative scarcity of science teachers. Nonetheless, she concludes:

> The status differences among these academic departments, however, are small, and often lie not in the automatic link to the discipline, but in the cultivated links to the administrators. The most intriguing glimpses of consequential differences in disciplinary status come from the departments not studied here, such as Industrial Arts. " (Siskin, 1991, pp. 207-208.)

Siskin speculates that the most dramatic status and resource differences are to be found between the academic and non-academic fields (vocational education, the arts, and special education). Her speculations are borne out in our interviews with the vocational teachers, who are united in their view that school's discretionary resources go most readily to develop academic programs. An industrial arts teacher laments:

> We sometimes feel like we're second class citizens, probably because the English department, the math department, or social studies department, or science department can yell for more money and they seem to get more money or more of the pie than their fair share, plus some.

The science chair at the same school confirms the status differential, observing that the math and science departments are rich in resources while the non-academic departments routinely get less. When the math and science departments elected not to compete for School Improvement Program monies, the chair anticipated some relief for the non-academic departments:

> We had gotten the lion's share of the funding... With the two departments pulling out, it at least gave the other departments a shot at getting their dipper in the kettle...It gave the art department and some of those other areas a far better chance because the two biggest automatic point gatherers were not in the game.

The political clout of departments rests not only on the external referent of a legitimate "field," but also on the closely cultivated ties between teachers or department heads and administrators. In these schools, administrators express respect for the broadly vocational aspects of secondary schooling coupled with a general lack of faith in the present worth or adaptability of traditional vocational education. Arnold Bennett, principal at Oak Valley, attributes the declining enrollment in industrial arts to a failure of innovation by vocational teachers: "There's a major problem in our industrial arts areas. ...I think so they can get kids into it who will be looking toward the state university system, they're going to need to adapt some things to sell their product better to this population." Elaine Eddy at Onyx Ridge echoes him: "I have to tell you, I'm very critical of the industrial arts programs. I think as a whole the teachers have put their heads in the sand and let the program die, and they blame the kids and not the program that they're offering."

Administrators not only control instrumental decisions regarding resources, but also establish the symbolic climate in which the non-academic departments operate. Olive Roark, a business teacher at Esperanza, describes her department's precipitous decline from prestigious "pilot program" to "part-time department" over a period of three years:

> At Esperanza, the first year I was here, the Business Department was called a Program of Excellence, and the first year I was here we were one of the top priorities in the school. The second year we were also very high. And from that point we started going down very quickly. Vocational subjects generally throughout the school seemed to take a downturn. Two years ago we became a Rapid Access English Program school for Spanish-speaking kids. So last year for the second year we suffered a loss of quite a few sections of our classes.

Ironically, many of the vocational teachers whom administrators criticize are fiercely entrepreneurial; they have maintained programs by pursuing external sources of financial support and by marketing their offerings successfully to students. But advances in program development tend to go unrecognized. Xenia Young says of Esperanza's business department:

> We became the first high school in Northern California to be certified by the state as having an outstanding program. But that was Beth Elgar and Olive Roark saying "Come on, come on, we have to re-write all these curriculum guides and everything!" But we were never recognized even by our district. Well, we got recognized by our district by having the state's coordinator come down and present us with a plaque at a board meeting, but it wasn't because the district knew or the superintendent knew.

Teachers who innovate may place demands on scarce internal resources. The traditional drafting teacher who "keeps up with the trends" is likely to propose a computer-based program requiring a costly array of computer equipment and software. The auto shop teacher at Oak Valley inventories his extensive efforts to remain current with changes in automobile technology, ranging from the computerization of various car systems to the refinements in smog testing. Yet the equipment that he is learning to use could not conceivably be purchased with the department's meagre budget. Meanwhile, coporate donations of state-of-the-art computer equipment find their way to the math department.

There is some reason to believe that "innovation" and "keeping up with the trends" in vocational education would be a mixed blessing in the eyes of administrators whose main priorities lie elsewhere. Conflict over "innovation priorities" is evident in the recent initiatives in technology at Oak Valley. To forge new ties across departments, and to enhance further the school's strong reputation with the community, Bennett has formed a cross-departmental committee on technology. This committee is highly visible, co-chaired by a young, dynamic English teacher and an influential science teacher. The committee has sponsored two days of schoolwide inservice training on microcomputers, and has developed recommendations for broadening the use of computer technology across the curriculum. Independent of this committee, a member of the industrial arts department has been working at the district level on a proposal to introduce courses in applied technology and principles of technology in the middle school and high school curricula. The proposed courses did secure the approval of Oak Valley's department heads during 1989-90, but only after the heads were assured that such "approval" was merely a step in the district's overall course development process and did not necessarily mean the courses would be offered at Oak Valley in the near future. When we asked how these two technology initiatives related to one another, if at all, the principal acknowledged the potential competition between the academic and vocational arenas over resources for technology: "Well, we're going to get into some haggling on the funding process of this thing."

In sum, departmental strength is reflected in (and maintained by) successful claims to valued resources. Among the forces that contribute to a departmental presence in a school, neither department size nor subject prestige weighs on the side of the vocational departments. With regard to control over material resources, there is little doubt that academic departments reign in these five schools. But departmental presence can also be felt by the intellectual and moral stance that a department adopts, individually and collectively, toward the work of teaching.

Departmental ethos and boundaries

Departments provide very different kinds of collegial homes for the teachers who inhabit them. A small number of prior studies offer quite widely varying portraits of departments and department leadership. The department heads and teachers interviewed by Johnson

(1990) claim that department members are engaged extensively in joint activity on matters of curriculum and instruction. But in his study of staff networks in two midwestern high schools, Cusick (1982) concluded that departments were principally instruments of administrative convenience. They offered neither pressure nor support for teachers to adopt a coherent stance toward curriculum and instruction; indeed, they had little to do with the intellectual and professional lives of the teachers assigned to them. Both of these portraits come to life again in our own data (see especially McLaughlin, this volume).

Teachers and administrators in these schools readily and vividly define individual departments by their characteristic stance toward subject, students, and schooling. They distinguish some departments, too, as conservative (sometimes "rigid") and others as innovative and "open." As subject subcultures, some departments would have to be judged intellectually weak, either because they were polarized over matters of curriculum priorities or because they defined themselves in administrative rather than professional terms. Other departments left a distinctive intellectual and social mark on the character of the school. In terms of their social cohesion, congenial departments in which teachers enjoy close friendships or share common views about teaching appear "stronger" than those in which people harbor contempt for one another or are polarized by deeply felt differences in beliefs and values (see also Bruckerhoff, 1991). Here, for example, an English teacher and social studies teacher in the same school present drastically different portraits of their respective departments:

> *English*:
>
> I came here [to interview] and I was really impressed right away with the teachers that were here in the English Department. ...They were really energetic and involved in what they were doing ... sharing ideas about what they were doing in class, what was working, showing students' work. ...It's very cooperative.
>
> *Social Studies*:
>
> There is no agreement in the department on what is important, no agreement on standards, no agreement on priorities. The faculty is out there floating. People are just putting in time.

In the English department office, one finds a group picture prominently displayed on the wall, and teacher traffic is heavy throughout the day. Conversations among teachers are frequent and lively. The social studies office, located nearby, is nearly empty of teacher traffic, and there is nothing in the physical environment that would suggest close personal or professional relations among the department's members. Of course, there is no necessary relation between personal "closeness" in a department and a disposition to act collectively in regard to teaching. Nonetheless, social cohesion may dispose a department more readily to cooperate on educational pursuits when the occasion arises. The English department prides itself on being open; it was not unusual to find substitute teachers gravitating to the English department to have lunch, regardless of what subject they are "covering" for the day. The department members also welcomed members of our research team, making time for us to have informal conversations and making room for us at the lunch table. Student teachers and other teachers new to the department commented on the warm and cooperative environment they discovered. This large English department promotes a sense of belonging among its immediate members, but its boundaries remain permeable. Other departments, including social studies, preserved a more "formal" stance

toward strangers and newcomers, as well as toward colleagues from neighboring departments.

Oak Valley's English department represents perhaps the clearest case of a department dedicated to a coherent program of studies to which most or all teachers contribute. The department is composed of teachers whose undergraduate academic major was English literature (or a related area of English language arts) and who teach full-time in the department. Most have long tenure in this school. Departmental identity is closely bound up with collective expertise, and with collective claims on the curriculum. Members treat the department not as an administrative convenience but, like similarly configured departments in Ball & Lacey's (1984) study of disciplinary subcultures, as an instrument of curriculum policy. Individual autonomy exists within the context of collective agreements regarding curriculum emphasis and, to a lesser extent, instructional preferences. The curriculum of the English department suggests a collectively-formulated program. Further, it suggests a departmental commitment to displace conventional patterns of individual course "ownership' with teachers' widespread knowledge of and participation in the broader curriculum. The chair explains:

> We started something a couple of years ago where every teacher is, not forced, but encouraged to pick up a new prep every other year. And the idea behind that one is so that courses didn't become so specialized to teachers that if a teacher were to leave the department and all of a sudden the course, you know somebody's stuck teaching it and doesn't really know how it's supposed to go and all that. [We] tried to remove the idea of special interest classes and say, "Look if it's in our department then it's worth being taught and so let's have people who can teach it."
>
> *So there's this sense of a departmental curriculum or set of course offerings, not <u>your</u> course in Shakespearean Literature...*
>
> Definitely.

Course offerings, staffing patterns, and course coordination all serve as policy mechanisms that may spur or impede collaborative activity within or across departments. Despite the size of Oak Valley's English department, teachers attain a remarkable familiarity with one another's teaching and a remarkable level of genuine agreement about their departmental priorities. They are supported in this achievement by their inclination to see themselves as engaged in a common task ("college preparation"), to underplay their sub-specialties and concentrate on commonalities in the broader discipline, and to promote strong curricular leadership from within their own ranks.

Academic and non-academic departments are positioned differently to act as instruments of curriculum policy and as guarantors of staffing and program configurations. At Oak Valley, for example, Consumer/Family Studies department bears a certain resemblance to the English department in its effort to achieve a certain curricular coherence. The department's course offerings reflect a decision to employ state funds to develop a set of occupationally-oriented programs in restaurant management, early childhood education, and fashion merchandizing. But unlike the English department, where teachers set out to learn courses across the department's curriculum, and where teacher turnover would have only marginal impact on the course offerings or core content, the consumer/family department relies on individually-developed one-person programs. It is thereby less flexible in its options for staffing, and its program continuity is vulnerable to teacher turnover.

(Indeed, the fashion merchandizing program was abandoned when the teacher who organized it left the school). In the industrial arts department, too, each of six teachers pursues a single specialty. Faced with enrollment declines, the department has devoted resources to help individual teachers bolster alternative courses, but has made no collective moves to re-consider and consolidate its curricular priorities.

Departments exude a certain spirit, one which varies widely both within and between schools. Interviews in any one department may be stamped by pride, or by indifference, or by frustrated pessimism. They also vary in their stance toward teachers, teaching, curriculum, and students—the intellectual and social character they assume as homes for teacher work. These differences in departmental environment prove consequential: measures of collegiality are closely correlated with innovativeness, support for student learning, and commitment to teaching (McLaughlin, this volume). The conditions supportive of departmental collegiality include a full complement of subject specialists, a subsidized and meaningful department head position, a budget adequate to encompass both program development and professional development, a coherent stance toward curriculum policy, and norms supportive of collective problem solving, innovation, and intellectual growth (see Figure 1).

Figure 1

Aspects of departmental strength

Departments are strengthened by:	**Departments are weakened by:**
Composition and leadership:	
Full-time membership	Part-time teachers and split assignments
Extensive subject-matter expertise	Weak or uneven subject matter background
Designated department head	Absence of formal leadership
Instructional leadership by chair	Administrative view of chair
Resource adequacy:	
Collective pursuit of resources	Individualistic pursuit of resources
Common space	No common space
Adequate time and regular meetings	Inadequate time and infrequent meetings
Departmental ethos	
Known and shared beliefs	Polarized beliefs
Open discussion of practice	Protective/private view of practice
Joint work on curriculum & assessment	Individual choices on curriculum & assessment
Teaching assignments rotated	Teaching assignments based on seniority
Department as instrument of policy	Department as administrative convenience

In some respects, the differences between strong and weak departments appear to be quite independent of subject matter. The English department at Oak Valley is a powerhouse; the same subject department at Esperanza is badly polarized. The same is true, certainly, within the vocational departments. Among the fifteen vocational departments we examined, perhaps four approach the spirit conveyed by Oak Valley's English department. The business department at Esperanza, for example, prides itself on its ability to overcome

philosophical differences in order to achieve programmatic unity and momentum; the department's pilot "business academy" has suffered from reductions in resources, but teachers continue to refer to it as a sign of the department's unity of purpose. And few departments conveyed quite the degree of alienation and balkanization expressed by the social studies teacher, although individual teachers in at least half of the fifteen vocational departments are discouraged by what one teacher describes as "the erosion of dignity."

Our investigations of life inside departments over the past three years have led us to believe that school level measures of "departmentalization" and "collegiality" are likely to be misleading, or at least that they offer an incomplete picture of the various bases of colleagueship in a secondary school. Within the same school, we find some departments that are powerful instruments of curricular policy and other departments that provide no more than an administrative label for a loose assemblage of individuals. (Indeed, reducing the wide range of variation and increasing the normative power of collegiality would appear to be a crucial element of a reform strategy). Vocational departments appear no more or no less inclined than academic departments to take a collective stand on curricular priorities, or to supply one another with professional support.

There remain, however, certain systematic differences between academic and vocational departments. That is, there are forces that tend more often than not to weaken vocational departments relative to academic departments. Across all five schools, academic departments appear stronger than vocational departments in the overall competition for symbolic, human, and material resources. In schools where academic achievement and preparation for college attract the greatest concentration of symbolic and material resources, vocational departments are seen as backwaters. Vocational teachers are more vulnerable to split assignments than are academic departments, and more likely to travel between schools. Their motivation and their opportunity for intensive participation in a department are both thereby diminished. Vocational departments are less able to act as a guarantor of preferred teaching assignments, breadth and depth in course offerings, and full-time department membership.

Among Colleagues

Subject affiliation and departmental membership powerfully define professional community in these comprehensive high schools. They do not, of course, exhaust the possibilities. In a six-period instructional day, most teachers spend five periods in the classroom. They come together (or not) in the moments before the school day begins or in the passing periods between classes, an assigned preparation period, lunch, and the occasional after-school meeting. Against a backdrop of departmental preoccupations and classroom privacy, however, one can detect considerable variations in the nature and extent of teachers' professional and personal relations with one another. Some teachers can be found in their classrooms throughout the day, even at lunch. They venture out only to collect mail from the office, or to attend required meetings. Others seem not isolated at all; when not in class, they are immersed in a round of lively and nearly continuous exchange with colleagues on topics ranging from student work or classroom activities to family matters, sports, and the state of the economy. Greetings exchanged in passing, and stories told in the moments between classes, convey some sense of a "backstage" life among the school's adults. Some individuals and groups exude openness, others a stiff reserve. Some colleagues supply one another primarily with a warm and congenial personal environment; others provide professional advice, ideas, or collaboration on new ideas or projects.

Friendships (and occasionally feuds) may span decades, and extend well beyond the school walls.

The collegial environment is in many ways more dynamic, more fluid, and more complex than might be anticipated by dwelling on the closed classroom door or on the boundaries constructed by subject and department loyalties. Yet in the relations between academic teachers and their volcational colleagues, the dominant theme is one of division: a general physical, social, and educational isolation that separates vocational from academic teachers; and a pattern of competition over student enrollment and other resources. Overall, the organization of time and space, curriculum and students, tends to separate individual teachers from one another, to further separate teachers considered "academic" from those in "non-academic" specialties, and to intensify the departmental basis of professional community.

Teachers do not all respond to isolation and subject segmentation in the same ways. That is, it would be a mistake to think of the vocational teachers as chafing for greater involvement while academic teachers serve as obstructionists. Indeed, the themes introduced by the vocational teachers are consistent with those sounded throughout the secondary teacher population. For some, the privacy of the classroom engenders a sense of entrepreneurial pride, a sense that one's program is an individual accomplishment and the basis for professional esteem. For others, programmatic isolation is offset by satisfactions achieved elsewhere. Thus, one business teacher chooses to remain in her computer lab most of the school day, but finds sufficient opportunity for collegial exchange in regularly scheduled department meetings. A home economics teacher devotes considerable time and energy to her own state-funded program in restaurant management, but is not inclined to pursue much involvement with colleagues; rather, she favors time spent with family and on outside involvements. Others settle for a version of benign neglect, or the absence of overt conflict. A home economics teacher at Valley says of the school's faculty, "There's not too much that we have in common, but I have no complaints about the other teachers." And still others pursue an idiosyncratic but cosmopolitan array of relationships and activities.

General patterns of status difference between the academic and the non-academic do not account fully for the place in a professional community occupied by individual vocational teachers. Vocational teachers build their personal reputations and construct their professional affiliations in a variety of ways. Some of them are comparable to the routes common to any high school teacher—classroom success, participation in coaching or other student extracurricular activities, volunteer participation on school committees, and participation in social functions. Nonetheless, for many vocational teachers isolation is a structural condition difficult to overcome. It remains unclear how patterns of service, committee participation, or school-level leadership might be converted to collaborations that would relieve teachers' isolation and advance the integration of vocational and academic study. The challenge is complicated further by the differentiated curriculum, and the pressure placed on non-academic courses to compete for symbolic recognition and material resources.

The general congeniality and warmth among the teachers at most of these schools does little to relieve an underlying competitive reality that centers on student enrollment.. As Connell (1985) and others portray the situation, such competition is not grounded in individual dispositions but in a policy orientation that favors the academic curriculum. State and local policy developments throughout the past decade have expanded the

academic course requirements for high school graduation, and narrowed the time available for students to pursue elective courses (especially electives deemed "non-academic").

Vocational teachers compete with one another and with academic teachers for sufficient student enrollment to sustain a full-time teaching assignment. In doing so, they often underscore the separation of academic from non-academic purposes. One home economics teacher distinguishes the appeal of her courses this way: "It's not theory. It's hands-on and it's something that you know that they can use." Elaborating the differences between academic and vocational pursuits aids in the competition among departments to claim domain over a course (and the associated teacher FTE). An industrial arts teacher recalls a dispute with the art department over teaching assignments for photography classes. Because art courses may satisfy university admission requirements (under a "fine arts" designation), the art department is in a favored position to attract student enrollment. The industrial arts department would have preferred joint credit for the course; if the course qualified for art credit, regardless of where it was taught, the industrial arts teachers could be assured of attracting some of the academically-inclined students. In the competition for enrollment, courses that meet requirements or courses that can offer academic credit are advantaged. When the art department refused to award art credit to a course taught in the industrial arts department, the industrial arts teachers were at risk of losing photography altogether. To maintain their class sections, they were pressed toward a course description that emphasized a vocational orientation:

> It was vocational skill training. We geared them in that direction.... This is for professional ends. These are the vocational areas that you want. For us, we believe timelines in getting stuff in is as important as the composition and the color and the lines and the repetition, the value, the art structure. We've all pretty much agreed in that area.

Relegated to the marginal realm of an "electives deepartment," vocational teachers employ a variety of means to market individual courses and programs to administrators and to students. One teacher insists that "We're not antagonistic with anybody about [the extra academic requirements] but we're all doing our publicity, saying 'Come here, come here. We have something to offer you.'" The stories that she and her colleagues tell about brochures and other marketing devices suggest both the amount of effort that may go into marketing activity and the numerous ways in which individual and departmental marketing schemes may be defeated.

Vocational teachers are left largely to their own devices to sustain a full-time teaching assignment composed of courses that both they and students find satisfying. Observers of high schools have drawn attention to the way in which academic teachers' own entrepreneurial activities could result in small empires or market niches of quite idiosyncratic course offerings that preserve student enrollment and maintain teacher interest, but compromise broader purposes. For teachers of academic subjects, electives have long been a way of maintaining personal autonomy with respect to curriculum and ensuring a "motivated" student clientele (Cusick, 1983; Finley, 1984). The path that vocational teachers are following, as they put forth proposals for equipment or other resources, and as they market their ideas and their courses to staff and students, is one that is well-trod in American secondary schools. The entrepreneurial strategy has taken new twists since the advent of reforms that expand academic requirements for high school graduation. Students experience increased pressure to enroll in courses with academic titles, offered for academic credit.

In our discussion of vocational curriculum and clientele (Little & Threatt, 1991), we described the way in which internal and external pressures support an individualistic form of entrepreneurialism. Teachers "hustle" and "scrounge" to secure additional resources. To the extent that we find collaboration, we find it turned inward, with members of a department working together to consolidate a favored position in the competition over students and other resources. That is, a survival orientation drives collaboration internal to a department, and constrains collaboration across departments.

In principle, entrepreneurial ventures or crossover assignments might provide the occasion for joint planning, might foster more extensive and intensive forms of collegial exchange, and might open up possibilities for experiments with an interdisciplinary curriculum. We have no evidence that they have done so in these cases. Broad questions of institutional purpose are thus obscured, and capacities for curriculum policy at the district, school, and departmental level diminished.

CONCLUSION

Three aspects of professional community underscore and sustain the "two worlds" of academic and non-academic teachers. Each is a potential guarantor of the status quo, or a potential lever of change. First is the legacy of subject specialization, and the conditions surrounding subject expertise and subject status. Second is the departmental organization of the high school, and the way in which it opens up or closes down opportunities for a more unifying construction of secondary schooling. And last is the generalized pattern of patchwork involvement among colleagues, and the collegial dynamic fostered by competition over student enrollment and other resources.

In increasing numbers of local communities, one finds a creeping unease about the failures of secondary schooling. Some proposed remedies, to be sure, tend in the direction of doing more of the same. They intensify pressures on teachers and students by specifying more time, more courses, more homework, and more tests. Other remedies require a re-examination of fundamental purposes, practices, and structures. They call into question aspects of schooling on which secondary teachers' identity and community have been based, among them subject specialism, age-grading, and differentiated curricula. It is within this emerging field of debate that one best locates problems in the integration of vocational and academic education.

We undertook this analysis of teachers' professional community (or more precisely, communities) in part to discover on what basis such integration of purposes and subjects might be founded. In these schools, at least, we find the language of subject specialisms dominant, and the structure of departments firmly in place. A few teachers and administrators envision more permeable boundaries between subjects, more meaningful ties across subject areas, and more sensible relations between school and work. Among the academic teachers, however, there are few examples of cross-subject curriculum planning. Initiatives that could properly be judged interdisciplinary were simply not present in these schools on any meaningful scale (though there are well-known exemplars within the state, such as the Humanitas project in Los Angeles). Among the vocational teachers, the assault on subject boundaries takes the form of campaigns to win academic credit for vocational courses. Cross-department staffing between vocational and academic departments (as when industrial arts teaches are assigned to teach basic math) tends to be seen as an

accommodation to existing course demand, rather than pursuit of a policy that favors cross-disciplinary work or that seeks a more robust integration of academic and vocational perspectives. The kinds of fully integrative models proposed by Grubb and his colleagues (Grubb et al., 1991) are not in evidence here.

Those who would venture seriously to alter the character of secondary schooling, in the manner undertaken by Sizer's (1992) fictional Franklin High School, must contend not only with long-standing assumptions (or stereotypes) about students and learning, but also with long-standing features of teaching as an occupational and organizational community. Collegial exchange is both more frequent and varied than outsiders might imagine, and less concentrated and consequential than teachers would require to re-invent their work and their workplace. The departmentalization and subject affiliations that remain powerful facts of life in secondary schools are sustained not only by the dispositions of individuals but also by a range of internal practices and by powerful externalities. Ironically, the very resources that give some departments their strength may operate as obstacles in efforts to create more open boundaries among subject disciplines. That is, a department with a full-time cadre of subject specialists and well-established curricular policies might also be so committed to subject integrity that it would act as a barrier to more broadly conceived secondary curricula. And among the external forces, for example, university admission requirements exercise a chilling effect on innovation in the secondary curriculum. Teachers might be driven to modify their subject orientations and commitments if the university were to require evidence that students had participated in cross-disciplinary coursework, or had engaged in projects that required integrating their knowledge from multiple disciplines (a complex problem in urban planning, for example).

Whatever impetus that teachers themselves feel for "redesigning the American high school," as Sizer casts it, resides primarily in the shifting composition of the student population, especially in urban districts, and in the escalating cry that schools are failing their students. Another impetus to change, felt less directly by teachers but introduced by the larger community of parents and employers, is the changing nature of the work and workplace that await the young. In the eyes of most reformers, the impetus to change is weakened in part by the conservative force of teachers' subject loyalties and schools' departmentalized structures. That view rings true, yet remains too limited when held up against the mirror of these schools, each of which offers in the range of its professional worlds more resources for reform than we have so far been able to tap.

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